

Application No.: 10/719959

Case No.: 59010US002

REMARKS

Claims 1-4, 13-14, 16-19, and 21-23 have been rejected under 35 USC § 103 as being unpatentable over U.S. Patent 6,016,804 to Gleason et al. in view of 6,497,232 to Fecteau et al. Applicants respectfully submit that this rejection cannot be sustained.

Applicants' invention pertains to a new method of making a facepiece insert, which method comprises: (a) providing a supporting portion of a facepiece insert; (b) providing a fluid communication component separately from the supporting portion; and (c) securing the fluid communication component to the supporting portion to form the facepiece insert.

The invention also provides a new method of making a respiratory mask body by securing a compliant face-contacting member to the facepiece insert so produced.

The present invention further provides a new facepiece insert that comprises:

- (a) a supporting portion of a facepiece insert; and
- (b) a fluid communication component that is non-integrally joined to the supporting portion.

In the present invention, the fluid communication components — which commonly are critical tolerance components because they include more complicated and intricate filter attachment mounts and valve seats — are provided in a first step, and, in another step, a supporting portion of a facepiece insert is joined to the fluid communication component. The facepiece insert and its fluid communication components may be made using, for example, injection molding procedures that are carried out as separate operations. The multi-stage operation may address the tolerance mismatch between the insert components. Because the supporting part(s) and the fluid communication part(s) of the insert are separately provided, the inventive method can also support a beneficial distributed manufacturing scheme where fluid communication components can be produced in one location, with the associated expertise and equipment, and the final insert assembly can be carried out in a second location, where the expertise and associated equipment are lacking. And if a change to the fluid communication component is needed, for example, to allow for a different type of filter attachment, the whole facepiece insert does not need to be reconfigured in the mold. A separate mold need only be provided for the fluid communication component of the facepiece insert.

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The primary reference to Gleason describes a facepiece insert that is suitable for use with a respiratory mask. As shown in FIG. 4, Gleason's facepiece insert 26 is a single solid part. The fluid communication components 42 and 44 are integrally joined to the supporting portion of the insert 26. Gleason thus, clearly does not recognize the method or respiratory mask of applicants' invention.

The whole thrust of the Fecteau disclosure is to provide a release mechanism for a respirator harness. In FIG. 2, Fecteau shows fluid communication components that are separate from a mask body or facepiece 22. Fecteau, however, does not describe a facepiece insert. Because Fecteau does not use a rigid insert, the Fecteau mask apparently must use thicker rubber throughout essentially the whole mask body (and therefore would be heavier) to support the filter cartridges and valves.¹ Because Fecteau does not describe a rigid insert, it clearly cannot suggest the use of fluid communication components that are separate from the supporting portion of the rigid insert. Only applicants' invention describes a method of making a rigid insert, where the fluid communication component(s) is provided separately from the supporting portion of the insert. Further, only applicants' invention recognizes the benefits that are entailed when the fluid communication component is so provided. As indicated above, when the supporting portion and fluid communication components are made separately, the higher tolerance components can be manufactured in a location where persons are present who have the resources and training to correctly manufacture these parts. The present invention allows less room for error in manufacturing the higher tolerance parts. The present invention therefore is more versatile than prior manufacturing techniques. Further, a whole new mold does not need to be provided when a different filter mount is decided to be employed. Therefore, if a different filter cartridge is desired to be used on the same facepiece, the manufacturer does not have to fashion a whole new mold for the article.

¹ Please see applicants' specification on page 1, lines 15-20, which describes the thicker rubber facepieces that used to be used prior to the invention of rigid inserts in U.S. Patent 5,062,421 to Burns et al.

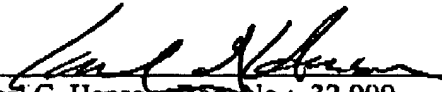
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Because Gleason and Fecteau fail to teach or suggest the basic elements of applicants' invention and also fail to recognize the benefits that are provided by the invention, these references, whether taken alone or in combination, would not have rendered applicants' invention obvious to a person of ordinary skill within the meaning of 35 USC § 103. Please reconsider the obviousness rejection in light of the comments set forth above.

Respectfully submitted,

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Date

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